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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,862	12/14/2004	Kenji Hyodo	450100-05035	9013

7590 12/09/2009
William S Frommer
Frommer Lawrence & Haug
745 Fifth Avenue
New York, NY 10151

EXAMINER

CHIO, TAT CHI

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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12/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,862	Applicant(s) HYODO, KENJI	
	Examiner TAT CHIO	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/15/2009 have been fully considered but they are not persuasive.

Applicant argues that the combination of Amada, Kawamura, and Tanaka does not teach "forming second audio data by compression encoding first audio data".

In response, the examiner respectfully disagrees. Amada teaches in the case of the long play mode in which a digital video and audio signal having a transmission bit rate which is $1/N$ of the standard transmission bit rate, the recording servo circuit 41 receives the output control signal CR2 from the digital recording mode selecting circuit 52 to control the rotation speed R of rotary drum 5 to the second rotation speed R2 which is the same as that in the standard play mode and the transportation speed V of magnetic tape 6 to a transportation speed ($V2/N$) which is $1/N$ of the second transportation speed V2 in the standard play mode. Delivered out of the digital recording signal processing circuit 32, on the other hand, is a recording signal SR3 which is compressed on time domain to $1/N$ in synchronism with the rotation of the rotary drum 5. Therefore, the a new recording signal is generated by compressing the recording signal SR3 that has video signal and audio signal.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amada et al. (US 6,339,676 B1) in view of Kawamura et al. (6,075,920) and Tanaka (5,541,739).

Consider claims 1 and 3, Amada et al. teach a recording apparatus for recording video data and audio data corresponding to the video data onto a recording medium, comprising: data forming means for forming second video data which is data based on first video data and whose transmission rate is lower than that of said first video data (col. 13, lines 41-45), forming second audio data by compression encoding first audio data, said second audio data having a plurality of channels which is data based on said first audio data having zero, one, or a plurality of channels corresponding to said first video data and whose transmission rate is lower than that of said first audio data (col. 13, lines 41-45, col. 4, lines 1-16), and outputting data of a low rate in which said second video data and said second audio data have been multiplexed (col. 4, lines 1-16); recording means for recording said first video data, said first audio data, and said low-rate data corresponding to the first video data and first audio data in sequence onto the recording medium (Fig. 1 and Fig. 7 and col. 13, line 63-col. 14, line 14 and col. 14, lines 52-67).

However, Amada et al. do not explicitly teach wherein said data forming means sets said number of channels of said second audio data to a fixed value independent of change of said number of channels of said first audio data during recording process and

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recording means for recording meta data corresponding to the first video data and first audio data onto the disc-shaped recording medium.

Kawamura et al. teach recording means for recording meta data corresponding to the first video data and first audio data onto the disc-shaped recording medium (Fig. 1 and Fig. 3-Fig. 5) and wherein said first video data, said first audio data, said low-rate data, and said meta data are recorded in continuous areas on the disc-shaped recording medium and are recorded in a particular sequence (Fig. 1 and Fig. 3-Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to record meta data corresponding to the first video data and first audio data onto the disc-shaped recording medium to improve the availability of the data recording medium.

Tanaka teaches data forming means sets said number of channels of said second audio data to a fixed value independent of change of said number of channels of said first audio data during recording process (col. 2, lines 23-41 and col. 5, lines 1-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the technique of selectively recording audio channels to permit long-time recording of the digital signal without impairing the quality of the audio signals.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amada et al. (US 6,339,676 B1) in view of Kawamura et al. (6,075,920) and Tanaka (5,541,739) as applied to claim 1 above, and further in view of Kuroiwa et al. (US 6,788,881 B1).

Consider claim 2, Amada et al. teach a recording apparatus, wherein said data forming means forms audio data showing silence to the channels which do not correspond to the channels of said first audio data among said plurality of channels of said second audio data and outputs said low-rate data (col. 4, lines 1-16, if one of the input audio channels is missing, then the output of that channel also has no audio.)

However, Amada et al., Kawamura et al., and Tanaka do not explicitly teach said second video data and said second audio data including the channels of the audio data showing said silence have been multiplexed.

Kuroiwa et al. teach said second video data and said second audio data including the channels of the audio data showing said silence have been multiplexed (col. 6, lines 55-65 and Fig. 6). Therefore, it would have been obvious to apply the technique of including the channels of audio data showing said silence have been multiplexed to improve the recording apparatus to enable efficient data management.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHIO whose telephone number is (571)272-9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Q. Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621